

California Bay-Delta Program

Conveyance Program Multi-Year Program Plan (Years 4-7)

Implementing Agencies:

Department of Water Resources

United States Bureau of Reclamation

August, 2003



Goals and Objectives

Goal of the Program and CALFED Record of Decision Commitments

The goal of the Conveyance Program is to identify and implement water conveyance modifications in the Delta that will:

- Improve water supply reliability for in-Delta and export users
- Support continuous improvement in drinking water quality
- Complement Delta ecosystem

The CALFED Record of Decision (ROD) identified three commitments to be met. For each ROD commitment, key objectives have been identified for the Conveyance Program:

- **South Delta Actions** – to increase State Water Project (SWP) and Central Valley Project (CVP) export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met.
 - Increase SWP pumping from the current limit to 8,500 cubic feet per second (cfs) from March 15 to December 15, and modify existing pumping criteria from December 15 to March 15, to allow greater use of SWP export capacity and the installation of permanent operable barriers in the south Delta.
 - Increase SWP pumping to the maximum capability of 10,300 cfs.
 - Increase fish protection by improving fish screening at CVP and SWP export facilities.
 - Design and construct floodway improvements on the lower San Joaquin River to provide conveyance, flood control and ecosystem benefits.
 - Reduce agricultural drainage from Veale and Byron Tracts in the Delta.
- **North Delta Actions** – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem.
 - Evaluate and implement improved operational procedures for the Delta Cross Channel (DCC) to address fishery and water quality concerns.
 - Simultaneously evaluate a screened through-Delta facility on the Sacramento River of up to 4000 cfs.
 - Design and construct floodway improvements in the North Delta to provide conveyance, flood control, and ecosystem benefits.

- **Delta Mendota Canal/California Aqueduct (DMC/CA) Intertie Actions** – to consider the need for two specific DMC/CA intertie projects which physically connect the SWP and CVP facilities.
 - One connection would occur between the Delta Mendota Canal and California Aqueduct west of the City of Tracy.
 - One connection would be an intertie between the CVP intake facility and the SWP’s Clifton Court Forebay with a corresponding increase in the capacity of the Forebay’s screened intake.
- **Complimentary Actions** – objectives that were not analyzed in the final Programmatic EIS/EIR.
 - The Temporary Barriers Project will seasonally install up to three rock flow control structures and one rock fish control structure in south Delta channels at various times through 2007, or until permanent flow control structures are constructed under the South Delta Improvements Program (SDIP).
 - Take additional actions to protect navigation and protect local diverters in the South Delta who are not adequately protected by temporary barriers as part of the Temporary Barriers Project.
 - Evaluate a bypass to the San Felipe Unit at the San Luis Reservoir to increase the operational flexibility of storage in San Luis Reservoir and ensure a high quality, reliable water supply for San Felipe Division contractors potentially at risk due to “low point” water levels in the San Luis Reservoir.
 - Facilitate water quality exchanges and similar programs to make high quality Sierra Nevada water in the eastern San Joaquin Valley available to urban Southern California interests.
 - Implement a Sacramento and San Joaquin Comprehensive Study to improve the flood control efforts from the Sacramento and San Joaquin Rivers out to the San Francisco Bay.

Accomplishments

South Delta Actions – to increase State Water Project (SWP) and Central Valley Project (CVP) export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met.

8,500 cfs and Permanent Operable Barriers (South Delta Improvements Program):

- Continued preparation of preliminary designs and the production of the Action Specific Implementation Plan (ASIP), a science symposium on the findings of the ASIP, public review of the EIR/EIS, and selection of a preferred alternative along with the CALFED Mid-Stage 1 package of actions.
- Secured the services of a meeting facilitator which helped resolve most issues regarding the project-specific operations plan.

Clifton Court Fish Screens and 10,300 cfs:

- Developed several alternative conceptual designs and cost estimates for a new intake and fish facility for Clifton Court Forebay.
- Performed preliminary engineering analyses and collected geologic information on potential intake sites.
- Initiated debris studies to improve trash rack collection efficiency at water project fish salvaging facilities.
- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay and Tracy Fish Test Facility projects. The Forum is currently evaluating background information regarding these projects.

Tracy Fish Test Facility:

- Began evaluating alternatives for the Tracy Fish Test Facility (TFTF).
- The Tracy Technical Advisory Team met and developed plans for a TFTF.
- Awarded contracts for a traffic study and public involvement for the TFTF.
- Purchased approximately 30 acres of property adjacent to the proposed construction site to be used for construction purposes.
- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay and Tracy Fish Test Facility projects. The Forum is currently evaluating background information regarding these projects.

Lower San Joaquin Flood Improvements:

- Continued coordinating this project with the U.S. Army Corps of Engineers and the Comprehensive Study Team.
- Evaluating opportunities for conceptual flood improvements as identified in the internal draft Comprehensive Study Lower San Joaquin River Assessment Information Report (October 2001).
- Pursuing alternative funding sources for potential concept-projects along the lower San Joaquin River, including Proposition 13 Flood Corridor Protection Program (FCPP) grant program.
- Assisting Reclamation District 2107 in the preparation and submission of an FCPP grant proposal seeking approximately \$5 million for flood corridor protection, agriculture preservation, and ecosystem restoration.

Old River and Rock Slough Water Quality Improvement Projects:

- Collected and analyzed water quality samples from numerous locations in Old River and Rock Slough, evaluated sampling results, and prepared an internal draft technical memorandum.
- Surveyed project areas to identify potential drainage sources and Mapped potential drainage sources.
- Initiated comparison of preliminary analytical data to historical data.
- Developed methodology for evaluation of alternatives.
- Initiated evaluation of sources and modeling approach and development of preliminary model.
- Conducted a CALFED Veale/Byron Workgroup public meeting on May 28, 2002.
- Submitted a draft internal technical memorandum in January 2003.

North Delta Actions – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem.

Delta Cross Channel Re-Operation:

- Conducted two years of studies and experiments to provide a solid basis for future operations of the DCC.
- Conducted intensive hydrodynamic and water quality monitoring of DCC tidal operations.
- Conducted juvenile/adult fish tracking studies.
- Independent Science Panel reviewed all work plans and results of first two years of studies.
- Held public workshops to present the preliminary results of the studies.

Through-Delta Facility:

- Developed an integrated DCC/Through-Delta Facility (TDF) Work Team.
- Formed a North Delta Fish Facilities Technical Team to assist in developing screening concepts for the Sacramento River 4,000 cfs intake and facility concepts for the TDF discharge into the Mokelumne River.
- Using computer models, analyzed the possible benefits of a joint DCC and TDF operation.
- Initiated three research projects to address whether adult fish species entering a TDF can be safely lifted back into the Sacramento River system.
- Commenced research at U.C. Davis regarding fish friendly trash racks that may be used on a TDF.

North Delta Flood Control and Ecosystem Restoration Improvements Program:

- Awarded a consultant contract for preparation of an EIR/EIS; drafted Chapter 1 of EIR/EIS including Purpose and Need Statement; outlined subsequent chapters; nearing completion of biological surveys.
- Constructed a regional hydraulic model to be used for alternatives analysis and completed a peer review process of the model.
- Worked with the U.S. Army Corps of Engineers (USACE) and the Reclamation Board to amend the existing feasibility study authorization to allow USACE Planning to act as federal lead agency for the project.
- Filed a joint Notice of Intent/Notice of Preparation (NOI/NOP) for the North Delta Flood Control and Ecosystem Restoration Improvements with the USACE.
- Conducted joint public scoping meetings with the USACE.
- Initiated development of technical alternatives and screening criteria for flood control and ecosystem restoration.
- Engaged North Delta Agency Team to review project permitting requirements, develop ASIP, and advise preparation of EIR/EIS.

- Identified and initiated strategies to address science uncertainties with the proposed project.
- Negotiated and initiated the processing of contracts to address science issues including sediment dynamics modeling and academic collaboration.

SWP/CVP Intertie Actions – to consider the need for two specific SWP/CVP intertie projects which physically connect the SWP and CVP facilities.

Delta Mendota Canal/California Aqueduct Intertie:

- Completed a Value Planning Study, completed CALSIM and DSM modeling studies, and initiated environmental documentation and conceptual designs.

Clifton Court Forebay/Tracy Pumping Plant Intertie:

- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay, Tracy Fish Test Facility, and intertie projects. The Forum is currently evaluating background information regarding these projects.

Complimentary Actions – objectives that were not analyzed in the final Programmatic EIS/EIR.

Temporary Barriers Project:

- Obtained all necessary permits for continuing the project.
- Installed three portable pumps on Union Island to mitigate the effects of the barriers upstream of these diversions.
- Submitted an application to the USACE to conduct limited dredging and extend agricultural diversions, as necessary, in the south Delta area.
- Signed an agreement with a landowner on Coney Island to replace a siphon with a pump and modify the on-island distribution system.

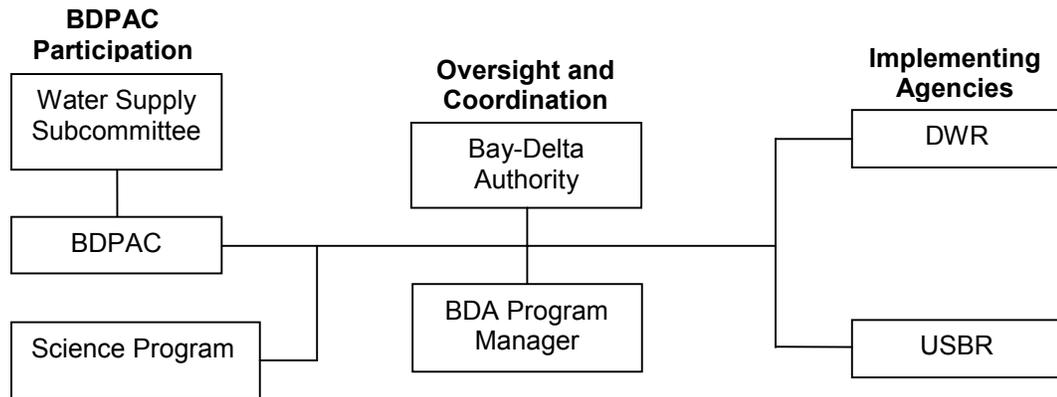
San Luis Reservoir Low Point Improvement Project:

- DWR signed an agreement for Santa Clara Valley Water District (SCVWD) to conduct the Low Point Improvement Study.
- USBR issued a NOI for the study and contracted with SCVWD to conduct an appraisal level operational study of ways to re-operate Anderson Reservoir.
- SCVWD has completed the following regarding the project study:
 - Developed a project scope
 - Prepared a draft project work plan
 - Developed Goals and Objectives for the project
 - Developed a broad list of conceptual alternatives
 - Formed a Regulatory Compliance Work Group and a Stakeholder Committee to assist in project planning
 - Issued an NOP for the study in August 2002
 - Conducted public scoping meetings in August 2002
 - Completed an initial screening of approximately 80 conceptual alternatives

Oversight, Coordination, and Science:

- The California Bay-Delta Program provided general oversight to assist in meeting the goals and objectives of the Conveyance Program, ensure integration with other programs, and provide Science support, where necessary.
- DWR managed the overall Conveyance Program.

Program Structure



Agency

- California Bay-Delta Authority
- Department of Water Resources
- Department of Fish and Game
- U.S. EPA
- U.S. Bureau of Reclamation
- U.S. Army Corps of Engineers

Roles and Responsibilities

Oversight and coordination

State lead agency
 Coordinate activities with USBR
 Provides Conveyance Program oversight

Fisheries
 Permitting agency
 Review/comment on work products
 Conduct field studies
 Participate in meetings/hearings

Water Quality
 Review/comment on work products
 Participate in meetings/hearings

Federal lead agency
 Coordinate activities with DWR
 Conduct field studies
 Participate in meetings/hearings

Permitting agency
 Conduct field studies
 Review/comment on work products
 Participate in meetings/hearings

- U.S. Fish and Wildlife Service
 - Fisheries
 - Permitting agency
 - Conduct field studies
 - Review/comment on work products
 - Participate in meetings/hearings

- National Oceanic and Atmospheric Administration
 - Fisheries
 - Permitting agency
 - Review/comment on work products
 - Participate in meetings/hearings

- U.S. Geological Survey
 - Hydrodynamics and Modeling
 - Conduct field studies
 - Review/comment on work products
 - Participate in meetings/hearings

Major Activities

South Delta Actions – to increase State Water Project (SWP) and Central Valley Project (CVP) export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met.

- **8,500 cfs and Permanent Operable Barriers (South Delta Improvements Program)** – DWR is the lead agency for this project. DWR will complete the EIR/EIS and secure the permits to divert 8,500 cfs at Clifton Court Forebay and to install the permanent operable barriers in south Delta channels.

Schedule: Complete EIR/EIS and permits September 2004

- **Clifton Court Fish Screens and 10,300 cfs** – DWR is the lead agency for this project. The South Delta Fish Facilities Forum will review information on the Clifton Court Fish Screen project and is expected to make recommendations on the future development of this project.

Schedule: Completion yet to be determined

- **Tracy Fish Test Facility** – USBR is the lead agency for this project. The South Delta Fish Facilities Forum will review information on the TFTF project and is expected to make recommendations on the future development of this project.

Schedule: Completion yet to be determined

- **Lower San Joaquin Flood Improvements** – DWR is the lead agency for this project. As a result of the complexities involved in implementation of this project, project priorities and objectives will be re-evaluated with the USACE. It is expected to define and proceed with the development of the project in smaller parts or in phases.

Schedule: Ongoing

- **Old River and Rock Slough Water Quality Improvement Projects** – DWR is the lead agency for this project. Contra Costa Water District (CCWD) initiated this study. Parameter monitoring and water quality sampling will continue.

Schedule: Completion June 2007

North Delta Actions – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem.

- **Delta Cross Channel Re-Operation** – USBR is the lead agency for this project. The DCCTDF Team will evaluate the results of three years of studies and will make a recommendation for DCC re-operation. The DCC re-operation will be evaluated on hydrodynamics, water quality, juvenile releases in the vicinity of the DCC and TDF, and adult striped bass and sturgeon.

Schedule: Complete technical analysis and make recommendations Fall 2004

- **Through-Delta Facility** – DWR is the lead agency for this project. The DCCTDF Team will refine concepts and feasibility of TDF options, determine TDF benefits and impacts on water quality and fisheries, and determine the effects of TDF on other California Bay-Delta Program actions. An independent science panel will review all of the technical information of the three years of field and research studies developed for the project and provide its advice and recommendations on the technical viability and water quality and fishery benefits and impacts of a TDF. The DCCTDF will integrate and analyze the information and provide its recommendations to the California Bay-Delta Authority (CBDA). If CBDA determines that the TDF is needed, environmental documentation would be prepared, and preliminary design and environmental permitting for a proposed project would occur.

Schedule: Complete technical analysis and make recommendations Fall 2004 (If a decision is made to proceed in developing this project, work on the environmental documentation, preliminary design and environmental permitting for the project could be completed by 2007.)

- **North Delta Flood Control and Ecosystem Restoration Improvements Program – DWR** is the state lead agency for this project; USACE is the federal lead agency for this project. DWR and USBR will complete the environmental studies and the EIR/EIS.

Schedule: Completion early 2008

DMC/CA Intertie Actions – to consider the need for two specific SWP/CVP intertie projects which physically connect the SWP and CVP facilities.

- **Delta Mendota Canal/California Aqueduct Intertie – USBR** is lead agency for this project. USBR will work on public involvement, environmental justice, and tribal and science review.

Schedule: Completion September 2005

- **Clifton Court Forebay/Tracy Pumping Plant Intertie** – DWR is lead agency for this project. Work activities in support of providing increased operational flexibility to improve water quality, water supply reliability, and minimizing impacts on fish are expected to start in year 6.

Schedule: Completion yet to be determined

Complimentary Actions – objectives that were not analyzed in the final Programmatic EIS/EIR.

- **Temporary Barriers Project** – DWR is lead agency for this project. Agency, stakeholder, and local communication will occur regarding barrier status and operation through weekly reports via email. Planning and implementation of the agricultural diversions and modifications will be coordinated closely with local beneficiaries to perform work and to update State and Federal agencies.

Schedule: Complete annually until permanent operable barriers are installed (2008)

- **San Luis Reservoir Low Point Improvement Project** – USBR is the lead agency for this project. The Regulatory Compliance Work Group and Stakeholder Committee will assist in project planning. Coordination through public meetings and fact sheets is ongoing. Multi-agency and public coordination will continue throughout the planning process and a feasibility report and environmental documents will be prepared. Ongoing State and Federal agency coordination and stakeholder consultation will continue through years 4-7. Design and construction is expected in year 6.

Schedule: Completion Ongoing

- **Oversight, Coordination, and Science** – CBDA will provide general oversight to assist in meeting the goals and objectives of the Conveyance Program, ensure integration with other programs, and provide Science support, where necessary. DWR will manage the overall Conveyance Program

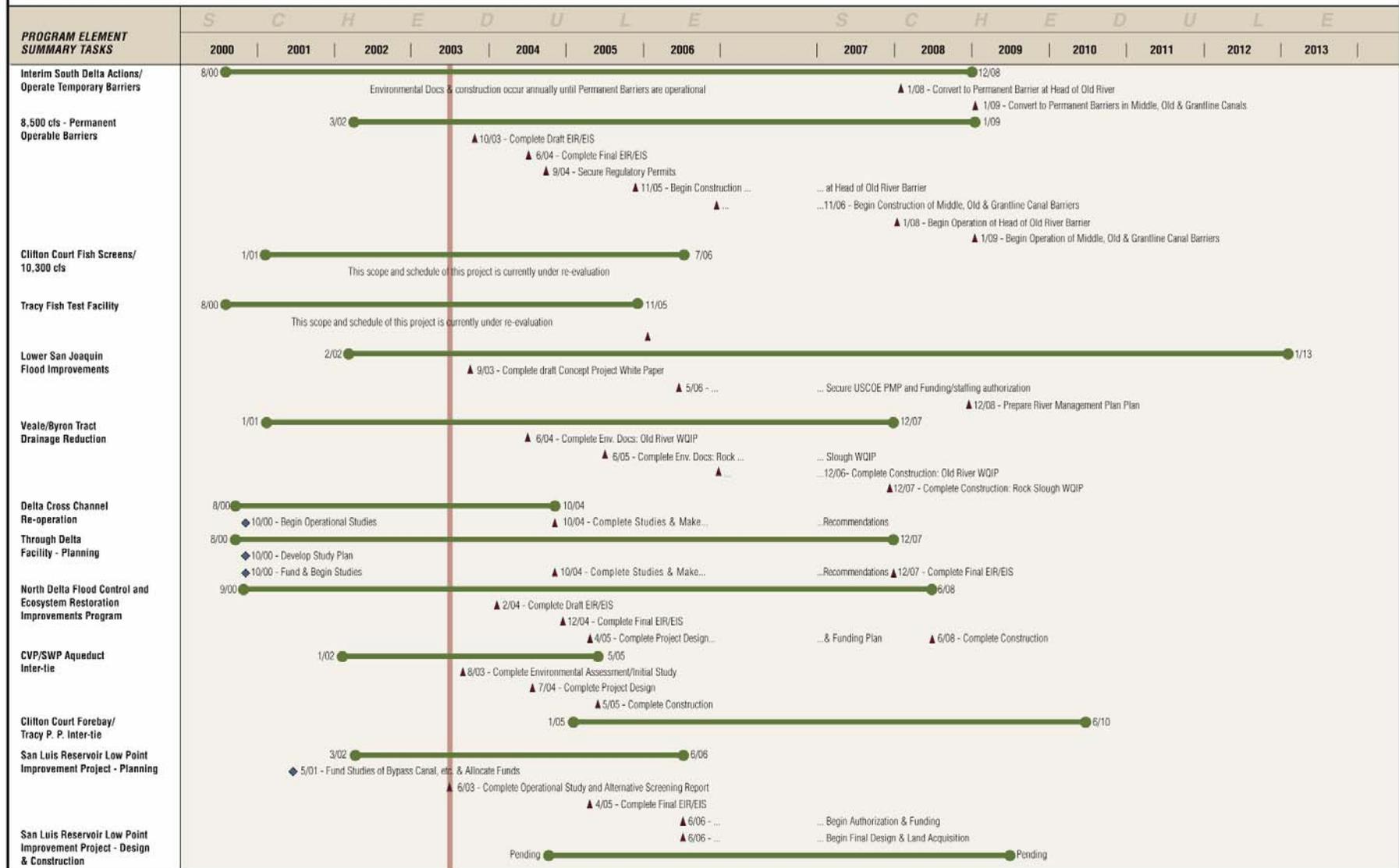
Schedule: Completion Ongoing

Schedule

CONVEYANCE

The public scoping process has begun for increasing South Delta pumping to 8,500 cfs and a draft impact analysis has been completed for construction of permanent barriers, but the schedule for both projects has been delayed one year to 2004. Funding constraints and related technical issues have led to delays and a reevaluation of the Tracy Fish Test Facility and screening of Clifton Court Forebay. The schedule for San Luis Low Point has been revised due to expansion of scope, while environmental review of North Delta Flood Protection and Ecosystem Restoration Project has been delayed due to lack of funding and staff.

Completed Milestone ◆ Remaining Milestone ▲ Present Schedule ● Date Reporting Period Ends —



Year 4 Activities

- **8500 cfs – Permanent Operable Barriers**
Complete public draft ASIP and draft EIR/EIS, Initiate formal consultation, Complete Final EIR/EIS, Obtain Notice of Determination, Final BO and NCCP determination, Record of Decision.
Schedule: Completion June 2004
- **Clifton Court Fish Screens – 10,300 cfs**
Complete reevaluation of the South Delta Fish Facility Forum on the scope and implementation of this project.
Schedule: Completion To Be Determined
- **Tracy Fish Test Facility**
Complete reevaluation of the South Delta Fish Facility Forum on the scope and implementation of this project.
Schedule: Completion To Be Determined
- **Lower San Joaquin Flood Improvements**
Draft concept project white paper discussing the issues and proposed development strategy for the project.
Schedule: Completion September 2003
- **Old River and Rock Slough Water Quality Improvement Projects**
Old River WQIP: Complete environmental documentation and permit application.
Schedule: Completion June 2004
- **Delta Cross Channel Re-operation**
Submit findings of research and analysis to BDPAC Drinking Water Quality, Water Supply and Ecosystem Restoration Subcommittees.
Schedule: Completion Summer 2004
- **Through Delta Facility – Planning**
Submit findings of research and analysis to BDPAC Drinking Water Quality, Water Supply and Ecosystem Restoration Subcommittees.
Schedule: Completion Summer 2004
- **North Delta Flood Control and Ecosystem Restoration Improvements Program**
Complete administrative draft EIR/EIS.
Schedule: Completion February 2004
- **Delta Mendota Canal/California Aqueduct Intertie**
Complete final design specifications.
Schedule: Completion November/December 2004
- **Clifton Court Forebay/Tracy Pumping Plant Intertie**

Work activities to be determined.

Schedule: To Be Determined

- **Interim South Delta Actions**

Obtain environmental docs and permits, install and remove Temporary Barriers.

Schedule: To Be Determined

- **San Luis Reservoir Low Point Improvement Project**

Complete alternatives screening report.

Schedule: Completion June 2003

Integration with the Science Program

The following is a description of the Science and performance evaluation activities associated with each of the Conveyance Program key objectives.

- **South Delta Actions** – to increase SWP and CVP export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met
 - **8,500 cfs and Permanent Operable Barriers** – the Science Program will be holding a science symposium on the findings of the SDIP ASIP after the draft ASIP is issued.
 - **Clifton Court Fish Screens and 10,300 cfs** – the study plan for fish collection, handling, transportation, and release at SWP and CVP fish salvaging facilities is currently under review by the Integrated Ecological Program (IEP). This will also involve review by science advisors and/or possibly a science review panel. This project may also pursue other fishery studies in the south Delta.
 - **Tracy Fish Test Facility** – ongoing studies to further define the integrated components of TFTF have been following a rigorous review process that includes peer review, interagency/stakeholder review, and publishing of volume series.
 - **Lower San Joaquin Flood Improvements** – this project will be defining the science issues during the EIR/EIS phase, which has not yet been planned.
 - **Old River and Rock Slough Water Quality Improvement Projects** – current plans for science and performance evaluation are under review by CCWD.
- **North Delta Actions** – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem
 - **Delta Cross Channel Re-Operation and Through-Delta Facility** – an independent science panel has reviewed each proposal for studies to address 22 unknowns outlined in the overall workplan for the DCC and TDF, and their recommendations were included in the final work plans. The panel will also review this years work plans and recommendations to management.
 - **North Delta Flood Control and Ecosystem Restoration Improvements Program** – science issues include sedimentation processes, dendritic channel creation and function, exotics, mercury methylation, salinity/WQ effects (organic carbon, THM), subsidence reversal, and hydrodynamics.
- **SWP/CVP Intertie Actions** – to consider the need for two specific SWP/CVP intertie projects which physically connect the SWP and CVP facilities

- **Delta Mendota Canal/California Aqueduct Intertie** – Year 3 includes coordination with the Science Panel to determine appropriate performance measures and/or adaptive management to incorporate into the project.
- **Clifton Court Forebay/Tracy Pumping Plant Intake Intertie** – work activities regarding this project are not expected to commence until year 6.
- **Other Actions** – objectives that were not analyzed in the final Programmatic EIS/EIR.
 - **The Temporary Barriers Project** – Monitoring data and general performance of past operations of these barriers will guide the design of the permanent operable barriers.
 - **San Luis Reservoir Low Point Improvement Program** – in Years 4-7, appropriate performance measures and adaptive management strategies will be developed in coordination with State and Federal agencies, stakeholders, and the public. In Years 5-7, appropriate performance measures and adaptive management strategies will be developed in coordination with State and Federal agencies, stakeholders, and the public.

Science Program Organization

Some projects have had some Science review, however a formal organization has yet to be determined.

Performance Standards

The following are expected performance measures which will be used to evaluate projects:

- **Administrative Performance Measures**
 - Monitor project funding and progress (percent expenditures, percent complete)
 - Cost-sharing of Project Costs (percent cost-sharing met)
- **Planning Performance Measures**
 - Cost per acre-feet
 - Cost per fish saved
 - Cost per acre of habitat restored or developed
- **Program Goal-Oriented Performance Measures**
 - Improve Water Supply Reliability (i.e. long -termwater deliveries)
 - Improve Water Quality (i.e. salinity, bromide, TOC, etc.)
 - Improve flood protection (i.e. reduction in flood repairs)
- **Operational Performance Measures**
 - Fish Take at Salvaging Facility (i.e. fish counts)
 - Fish Population Estimates (Counts and trends of fish populations)
 - Average export pumping level (cfs/time period)
 - Water Quality Levels (same as above)

Cross-Program Relationships

Storage, Conveyance, and Conjunctive Use – Includes 8500cfs/Permanent Operable Barriers; Clifton Court Fish Screens/10,300 cfs; Delta Mendota Canal/California Aqueduct Intertie

Environmental Water Account (EWA) – Includes 8500cfs/Permanent Operable Barriers; Clifton Court Fish Screens/10,300 cfs

Water Transfer – Includes 8500cfs/Permanent Operable Barriers; Clifton Court Fish Screens/10,300 cfs

Drinking Water Quality – Includes 8500cfs/Permanent Operable Barriers; Delta Cross Channel Re-operation; Through-Delta Facility; Old River and Rock Slough Water Quality Improvement Projects

Ecosystem Restoration – Includes Clifton Court Fish Screens; Lower San Joaquin Flood Improvements; Delta Cross Channel Re-Operation; North Delta Flood Control and Ecosystem Restoration Improvements

Science – Includes Tracy Fish Test Facility; Lower San Joaquin Flood Improvements; Old River and Rock Slough Water Quality Improvement Projects; North Delta Flood Control, Delta Cross Channel Re-operation; Through-Delta Facility and Ecosystem Restoration Improvements

Levee System Integrity – Includes Lower San Joaquin Flood Improvements; North Delta Flood Control and Ecosystem Restoration Improvements

Stage 1 Funding

Conveyance Funding (\$ in millions)	Program Year							Total
	1	2	3	4	5	6	7	
State	\$9.39	\$29.16	\$22.45	\$12.48	\$2.88	\$2.78	\$2.23	\$81.37
Federal	\$2.53	\$2.34	\$2.00	\$0.00				\$6.87
Local/Water User	\$8.35	\$13.28	\$24.35	\$19.35				\$65.33
Revised Stage 1 (Actual & Expected Funding) ¹	\$20.27	\$44.78	\$48.80	\$31.83	\$2.88	\$2.78	\$2.23	\$153.57
Original ROD (Aug, 2000) ²	\$29.0	\$66.0	\$150.0	\$198.0	\$220.0	\$160.0	\$98.0	\$921.0
Revised ROD (Dec, 2002) ³	\$21.4	\$47.3	\$45.7	\$86.4	\$146.3	\$192.1	\$172.3	\$711.5

¹ Funding for Years 1-2 reflects actual State encumbrances & expenditures and federal obligations. Funding for Year 3 reflects final State and Federal budgets. Funding for Year 4 reflects proposed Governor's and President's budgets. Expected funding in Years 5-7 includes remaining state bond funds until spent and ongoing State base funding. Federal appropriations for Years 5-7 are unknown; therefore, federal funding is not included beyond Year 4.

² Original Stage 1 funding estimates from the Record of Decision.

³ Revised ROD estimates are revised estimates of funding needs as of December 2002. These were included in the January 2003 program tracking report.

Stage 1 Funding by Task

Conveyance Funding (\$ in millions)	Program Year							Total
	1	2	3	4	5	6	7	
8,500 cfs—Permanent Operable Barriers	\$3.65	\$4.22	\$13.05	\$12.00				\$32.92
Clifton Court Fish Screens / 10,300 cfs		\$1.70	\$1.12	\$0.82	\$0.23	\$0.23	\$0.23	\$4.33
Tracy Fish Test Facility ¹	\$6.53	\$26.11	\$11.12	\$5.94	\$0.48	\$0.38	\$0.08	\$50.64
Lower San Joaquin Flood Improvements		\$0.06	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.56
Old River & Rock Slough Water Quality Improvement Projects		\$0.10	\$0.40	\$0.28				\$0.78
Delta Cross Channel Re-operation	\$0.50	\$2.49	\$1.48	\$1.05	\$0.03	\$0.03	\$0.03	\$5.61
Through Delta Facility	\$0.31	\$0.84	\$10.79	\$4.33	\$0.32	\$0.32	\$0.32	\$17.23
North Delta Flood Control & Ecosystem Restoration Improvement Program \$7.12			\$0.16	\$1.44	\$1.38	\$1.38	\$1.38	\$1.38
Delta Mendota Canal / California Aqueduct Inter-tie		\$0.21	\$0.03					\$0.24
Clifton Court Forebay/Tracy P.P. Inter-tie								\$0.00
Temporary Barriers	\$3.70	\$3.80	\$4.33	\$5.24				\$17.07
San Luis Reservoir Low Point Improvement Project	\$5.58	\$4.94	\$4.44	\$0.02				\$14.98
Oversight, Coordination & Science		\$0.15	\$0.50	\$0.67	\$0.34	\$0.34	\$0.09	\$2.09
Revised Stage 1 (Actual & Expected Funding) ²	\$20.27	\$44.78	\$48.80	\$31.83	\$2.88	\$2.78	\$2.23	\$153.57
Original ROD (Aug, 2000) ³	\$29.0	\$66.0	\$150.0	\$198.0	\$220.0	\$160.0	\$98.0	\$921.0
Revised ROD (Dec, 2002) ⁴	\$21.4	\$47.3	\$45.7	\$86.4	\$146.3	\$192.1	\$172.3	\$711.5

¹ Includes Fish Collection, Handling, Transportation and Release studies for Years 4, 5, & 6 of \$6.27M Prop 13 and \$0.3M Prop 50.

² Funding for Years 1-2 reflects actual State encumbrances & expenditures and federal obligations. Funding for Year 3 reflects final State and Federal budgets. Funding for Year 4 reflects proposed Governor's and President's budgets. Expected funding in Years 5-7 includes remaining state bond funds until spent and ongoing State base funding. Federal appropriations for Years 5-7 are unknown; therefore, federal funding is not included beyond Year 4.

³ Original Stage 1 funding estimates from the Record of Decision.

⁴ Revised ROD estimates are revised estimates of funding needs as of December 2002. These were included in the January 2003 program tracking report.

Project Map

